

Appl. No.: 10/017,924
Attorney Docket No. 10541-775
Reply to Office Action of January 11, 2005

I. Amendments to The Drawings

The Applicants have submitted a replacement sheet of drawings including amended Figure 10, as per the Examiner's suggestion in the Office Action dated May 18, 2004. The new replacement sheet of drawings includes the text "Replacement Sheet" in the top margin. No new matter was added in making these changes.

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III. REMARKS/ARGUMENTS

Claims 1, 9, and 14 have been amended. Accordingly, after entering this amendment, claims 1 and 5-19 remain pending in the application. Reconsideration and re-examination of claims 1 and 5-19 in view of the above amendments and the following remarks is herein respectfully requested.

Objections to the Drawings

The Examiner has objected to the replacement sheet of drawings that were filed in the previous response because the replacement sheet of drawings did not have "Replacement Sheet" in the top margin of the sheet. Accordingly, the Applicants have submitted a new replacement sheet of drawings with amended Figure 10 as per the Examiner's suggestions, wherein the replacement sheet includes the text "Replacement Sheet" in the top margin.

Rejections Under 35 USC §102(b)

The Examiner has rejected Claims 9-18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,865,500, issued to Newell (Newell).

The Applicants have amended claims 9, and 14 to more clearly describe the claimed invention and assert that Newell does not disclose each and every element of the invention as described in claims 9 and 14. Specifically, Newell does not disclose:

"the first segment, the second segment, and the twisted segment are all unitarily formed integral to said one of the first and second polygonal interfaces and all engage the other one of the first and second polygonal interfaces"

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Referring to the figures and specification of Newell, the male member of Newell is two pieces. A lower portion 15 is mounted onto an upper portion 14. The splines 14a and 15a of the upper and lower portion 14 and 15 are allowed to move relative to one another when the lower portion 15 twists with respect to the upper portion 14. The spring loaded screw 19 that holds the lower portion 15 onto the upper portion 14 allows this movement.

The present invention includes a single piece member wherein the first, second, and twisted segments are all unitarily formed together. The first, second, and twisted segments do not move with respect to one another. The Applicants assert that the amendments to claims 9 and 14 do not constitute new matter, as the member is shown as a unitary or one-piece member in the original drawings as filed.

Accordingly, the Applicants assert that claims 9 and 14, as amended, are allowable over Newell, and that claims 10-13 and 15-18 are allowable as depending, either directly or indirectly, from allowable independent claims 9 and 14 respectively. Therefore, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 102(b).

Rejections Under 35 USC §103(a)

The Examiner rejected Claims 1, 5-8, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of U.S. Patent No. 5,899,813, issued to Bunce (Bunce).

The Applicants have amended claim 1 to more clearly describe the claimed invention and assert that the combined references do not teach or disclose each and

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every element of the invention as described in independent claim 1. Specifically, none of the combined references disclose:

"one of the first and second polygonal interfaces has a first straight segment, a second straight segment, and a twisted segment positioned between the first and second straight segments wherein, the first segment, the second segment, and the twisted segment are all unitarily formed integral to said one of the first and second polygonal interfaces and all engage the other one of the first and second polygonal interfaces"

Referring to the figures and specification of Newell, the male member of Newell is two pieces. A lower portion 15 is mounted onto an upper portion 14. The splines 14a and 15a of the upper and lower portion 14 and 15 are allowed to move relative to one another when the lower portion 15 twists with respect to the upper portion 14. The spring loaded screw 19 that holds the lower portion 15 onto the upper portion 14 allows this movement.

The present invention includes a single piece member wherein the first, second, and twisted segments are all unitarily formed together. The first, second, and twisted segments do not move with respect to one another. The Applicants assert that the amendment to claim 1 does not constitute new matter, as the member is shown as a unitary or one-piece member in the original drawings as filed.

Further, the Applicants assert that Bunce teaches away from Newell and the combination of the two references is improper. Newell teaches an engagement wherein the member 13 can be inserted and removed from the member 11. Bunce teaches an interference fit between the flange and the shaft. The present invention and the invention of Newell include selectively engageable members that can be

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engaged and dis-engaged at any time. That is part of the functionality of the present invention.

Bunce teaches away from this by teaching that the shaft engages the flange by an interference fit. Bunch describes the method of attachment, wherein the flange is heated so the opening expands, and the shaft is placed within the opening such that when the shaft cools, the flange contracts onto the outer diameter of the shaft. The attachment of Bunce is not appropriate for the applications onto which Newell would be used, therefore, the Applicants respectfully assert that Bunce teaches away from Newell, and that the combination of Newell and Bunce is improper.

Accordingly, the Applicants assert that independent claim 1, as amended, is allowable over the cited references and that claims 5-8 are allowable as depending, either directly or indirectly, from allowable independent claim 1. Further, in light of the arguments made above, the Applicants assert that independent claim 14 is allowable, and that claim 19 is allowable as depending, either directly or indirectly, from independent claim 14. Therefore, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 103(a).

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Conclusion

The Applicants assert that pending Claims 1 and 5-19, as amended, are patentable. Applicants respectfully request the Examiner grant allowance of these claims. The Examiner is invited to contact the undersigned attorneys for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,

Dated: 2-2-2005

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